Hexadec-2-enylsuccinic anhydride

Other names:	2-Hexadecenyl succinic anhydride
	n-Hexadecenylsuccinic anhydride
	2,5-Furandione, 3-(hexadecenyl)dihydro-
	hexadecenylsuccinic anhydride
Inchi:	InChI=1S/C20H34O3/c1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16-18-17-19(21)23-20(18)22
InchiKey:	MZDVKESGWJINHY-CCEZHUSRSA-N
Formula:	C20H34O3
SMILES:	CCCCCCCCCCCCCCC=CCC1CC(=O)OC1=O
Mol. weight [g/mol]:	322.48
CAS:	32072-96-1

Physical Properties

Property code	Value	Unit	Source
gf	-97.01	kJ/mol	Joback Method
hf	-685.83	kJ/mol	Joback Method
hfus	48.69	kJ/mol	Joback Method
hvap	73.33	kJ/mol	Joback Method
log10ws	-6.34		Crippen Method
logp	5.724		Crippen Method
mcvol	286.510	ml/mol	McGowan Method
pc	1235.48	kPa	Joback Method
tb	839.03	K	Joback Method
tc	1042.12	K	Joback Method
tf	483.99	K	Joback Method
vc	1.111	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	942.07	J/mol×K	839.03	Joback Method
cpg	961.21	J/mol×K	872.88	Joback Method
cpg	979.05	J/mol×K	906.73	Joback Method
cpg	995.61	J/mol×K	940.57	Joback Method
cpg	1010.91	J/mol×K	974.42	Joback Method

cpg	1024.96	J/mol×K	1008.27	Joback Method
cpg	1037.79	J/mol×K	1042.12	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C32072961&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Joback Method:	https://en.wikipedia.org/wiki/Joback_method
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772

Legend

cpg:	Ideal gas heat capacity
gf:	Standard Gibbs free energy of formation
hf:	Enthalpy of formation at standard conditions
hfus:	Enthalpy of fusion at standard conditions
hvap:	Enthalpy of vaporization at standard conditions
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume